

This seems to show that the relative size of the bill is not a constant difference.

We had occasion to criticise the brevity of some of Mr. Mathews' diagnoses in former parts of his work, and the general lack of measurements. He says in reply to this criticism (p. 148) "if I gave pages of measurements, as is the custom of my American friends, it would not prejudice any worker in favor of my subspecific forms," and adds, "the work [of measuring] must be done, but the results only are necessary, not the methods whereby the results were achieved." Mr. Mathews seem to have misunderstood our criticism. We did not demand all the individual measurements, we quite agree with him on that point. What we did demand were measurements of *some* sort, either averages or those of a typical individual, in all cases where relative size is taken as the basis for subspecific differentiation. In the present numbers of the work there are a gratifying number of measurements.

The following new forms are proposed in the two parts before us. In Part II: *Calyptrorhynchus banksii samueli* (p. 120), Cent. Austr.; *Callocorydon fimbriatus superior* (p. 158), N. S. Wales; *Kakatoë galerita interjecta* (p. 184), Victoria; *K. g. aruensis* (p. 187), Aru Isl.; *Lophochroa leadbeateri superflua* (p. 196), S. Australia; *Ducorpsius sanguineus westralensis* (p. 211), Mid-west Australia; *D. s. normantoni* (p. 211), Queensland.

Also the following new genera: *Callocorydon* (p. 150), type *Psittacus fimbriatus* Grant. *Eucacatua* (p. 169), type *Psittacus galeritus* Lath.

In Part III: *Eolophus roseicapillus howei* (p. 234), Victoria; and the new genus *Layardella* (p. 289), type *Psittacus tabuensis*. This takes the place of *Pyrrhulopsis* Reich. which is based upon an unidentifiable figure of the head of a parrot.—W. S.

Matthew and Granger on Diatryma.¹—Mr. William Stein of the American Museum's Paleontological Expedition of 1916, was fortunate enough to discover a nearly complete skeleton of this remarkable bird previously known only from a few fragments obtained by Prof. E. D. Cope in 1874, in the Wasatch formation of New Mexico, and some others obtained in the Eocene of Wyoming, in 1911, by Mr. Granger. A single toe bone from the Eocene of New Jersey described by Prof. Marsh as *Barornis regens* has been referred to the genus by Dr. Shufeldt, but is regarded by the present authors as "practically indeterminate."

For the first time therefore we are able to determine what this extinct bird looked like and what are its relationships. It was about seven feet in height, ground-living, with vestigial wings, and with a shoulder girdle remarkably like that of the Cassowary. The resemblance to the Ratite birds is however considered by the authors to be due to parallelism and

¹ The Skeleton of Diatryma, a Gigantic Bird from the Lower Eocene of Wyoming. By W. D. Matthew and Walter Granger. Bull. Amer. Mus. Nat. Hist., Vol. XXXVII, Art. XI, pp. 307-326. May 28, 1917.

Diatryma is to be regarded as a primitive Carinate form most nearly related to *Cariama* among existing birds, although it was probably only an early offshoot from the line of which *Cariama* is the sole survivor, and not intimately related to it. It had an enormous skull measuring seventeen inches in length consisting mainly of a huge compressed beak. In this character it resembles the extinct *Phororhachos* of the South American Miocene but there the resemblance apparently stops.

Fossil birds as we know are extremely rare and the authors regard the discovery of the skeleton of *Diatryma* as a fifth landmark in the history of fossil ornithology, the earlier ones being the discoveries respectively of *Archæopteryx*, of the Jurassic; the Toothed Birds of the Cretaceous — *Hesperornis* and *Ichthyornis*; the Moas of New Zealand; and *Phororhachos* of the South American Miocene. *Diatryma* lived during the Lower Eocene near the beginning of the Age of Mammals and was a contemporary of the Four-toed Horse, *Eohippus*.

The corresponding bones of the complete skeleton seem to differ from those described by Cope as *Diatryma gigantea* as well as from Mr. Granger's specimens named *D. ajax* by Dr. Shufeldt, so it is described as a distinct species, *D. steini*, in honor of the discoverer. In their concluding pages the authors make some very pertinent remarks regarding fossil birds. They commend the revision of the fossil birds of North America and the figuring of the types, but call attention to the provisional nature of all the identifications, and the fragmentary and inadequate character of the material. "The identifications should not be changed but they should always be understood as comparisons and not as positive references." "They afford no ground for concluding that the antiquity of modern groups of birds is greater than that of modern groups of mammals. Nor, on the other hand, does it appear that they were notably less ancient."— W. S.

Dabbene on New Species of Geositta and Cinclodes.¹— In this paper Mr. Dabbene states that his researches have enabled him to recognize no less than 30 species of these two genera of which seventeen are residents of Argentina. The following are described as new: *Geositta punensis* (p. 54), La Guaiaca, Province of Jujuy; *G. rufipennis Burmeisteri* (p. 55), El Volcan, Province of Jujuy; *Cinclodes Oustaleti hornensis* (p. 58), and *C. antarcticus maculirostris* (p. 59), Isla Hermite, Cape Horn.— W. S.

Chapman on Santo Domingo Birds.²— In spite of the many explorations in Santo Domingo the avifauna, even at this late date, does not seem

¹ Especies y Subespecies Aparentemente Nuevas de Geositta y Cinclodes de la Republica Argentina y del Sur de Chile. Por Roberto Dabbene. Physis III, pp. 52-59. March 17, 1917.

² Descriptions of New Birds from Santo Domingo and Remarks on Others in the Brewster-Sanford Collection. By Frank M. Chapman. Bull. Amer. Mus. Nat. Hist., Vol. XXXVII, Art. XII, pp. 327-334. May 14, 1917.